

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and/or listings of claims in the application:

1. (Canceled)
2. (Previously Presented) The communication control device according to claim 21, wherein said internal communication path connects said cell distributors and said selectors in a ring.
3. (Original) The communication control device according to claim 2, comprising a token cell generator for generating a token cell used to grant said transmission rights to one of said selectors, and outputting said token cell onto said internal communication path.
4. (Previously Presented) The communication control device according to claim 3, wherein said token cell generator is provided in said selector.
5. (Previously Presented) The communication control device according to claim 3, wherein said token cell generator is provided in said cell distributor.
6. (Original) The communication control device according to claim 3, wherein said selector outputs a communication cell received from a connected processor onto said internal communication path when said token cell is possessed thereby.
7. (Original) The communication control device according to claim 3, wherein said selector outputs said token cell onto said internal communication path after outputting all of the communication cells received from a connected processor.
8. (Previously Presented) The communication control device according to claim 21, wherein said internal communication path comprises a common bus connected to said cell distributors and said selectors.

9. (Original) The communication control device according to claim 8, comprising a transmission rights manager for granting said transmission rights to one of said selectors.

10. (Original) The communication control device according to claim 9, wherein, when a request for transmission rights is received from one of said selectors, said transmission rights manager grants transmission rights to said selector after another selector has lost transmission rights.

11. (Original) The communication control device according to claim 9, wherein said transmission rights manager is provided in each of said processor interfaces.

12. (Previously Presented) The communication control device according to claim 11, wherein, when a request for transmission rights is received from one of said selectors, said transmission rights manager grants said transmission right to the selector after receiving information indicating the assignment or loss of said transmission rights from another transmission rights manager.

13. (Previously Presented) The communication control device according to claim 21, wherein said processor interface comprises a buffer unit for temporarily storing communication cells transferred to a connected processor from said cell distributor.

14. (Original) The communication control device according to claim 13, wherein said buffer unit comprises:

a buffer for temporarily storing communication cells;

a cell writer for writing communication cells received from said cell distributor to said buffer; and

a cell reader for reading the communication cells stored in said buffer and transmitting the communication cells to said processor.

15. (Previously Presented) The communication control device according to claim 21, wherein said processor interface comprises a buffer unit for temporarily storing communication cells transmitted from said processor to said selector.

16. (Original) The communication control device according to claim 15, wherein said buffer unit comprises:

a buffer for temporarily storing communication cells;

a cell writer for writing communication cells received from said processor to said buffer;

and

a cell reader for reading the communication cells stored in said buffer and transmitting the communication cells to said cell distributor.

17. (Previously Presented) The communication control device according to claim 21, wherein said processor interface comprises a format converter for converting the format of communication cells received from another of said processor interfaces via said internal communication path.

18. (Previously Presented) The communication control device according to claim 21, wherein said processor interface comprises a format converter for converting the format of communication cells to be transmitted to another of said processor interfaces via said internal communication path.

19. (Canceled)

20. (Currently Amended) The communication control device according to claim [19] 21, comprising a format converter for converting the format of communication cells received onto said internal communication path from said ~~externals~~ external communication pathways and the format of communication cells to be transmitted to said externals from said internal communication path.

21. (Currently Amended) A communication control device comprising:

a plurality of processors which perform predetermined parallel processing cooperatively;
a plurality of processor interfaces having one or more cell distributors and one or more selectors, in which each of said processors is connected to one of said cell distributors and one of said selectors;

an internal communication path which connects said cell distributors, [and] said selectors, a first external communication path, and a second external communication path wherein:

said cell distributors receive communication cells from said internal communication path and transfer the received cell to the corresponding processor when the destination of the received cell is the corresponding processor;

said selectors receive communication cells from said corresponding processor and output the communication cells onto said internal communication path when possessing a transmission rights; [and]

said transmission rights is granted to only one selector at the same time and the selector abandons the transmission rights when the selector ends the outputting of the communication cells received from the corresponding processor; and

wherein the communication control device processes said communication cells received from the first external communication path and transmits the communication cells to the second external communication path.